

ANNUAL REPORT FOR 2000



Manns Harbor Mitigation Site

Dare County

TIP No. R-2304, B-2301



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MANNS HARBOR MITIGATION SITE 2000 REPORT - EXECUTIVE SUMMARY

The following report summarizes the monitoring activities that have occurred in the past year at the Manns Harbor Mitigation Site. Construction began on this site in 1995. No hydrologic monitoring was required. Vegetation monitoring activities in 2000 represent the fifth year of monitoring. The site must demonstrate vegetation success for a minimum of three years or until the project is deemed successful. The site contains no vegetation plots.

The has almost complete aerial coverage of *Scirpus robustus* and *Juncus roemerianus*. Phragmites shows signs of stress due to the herbicide applications.

NCDOT was requested to repair areas disturbed by silt fence removal. This work was not completed in 1999 due to hurricane related problems. This work will be completed this winter.

Once that work is completed, NCDOT proposes to discontinue monitoring and close out the site.

1.0 INTRODUCTION

1.1 Project Description

The site is located near the intersection of US 64/US 264 and SR 1105 in Dare County (Figure 1). It is approximately 1.51 acres in size and consists of creation, enhancement, and management of marsh grass species. The project is designed to offset the impacts associated with R-2304 and B-2301.

1.2 Purpose

This report details the vegetation monitoring during 2000 at the Manns Harbor Mitigation Site. Hydrologic monitoring was not required on this site.

1.3 Project History

Spring 1995	Natural Colonization of Scirpus
October 1996	Vegetation Monitoring (1 yr.)
September 1997	Vegetation Monitoring (2 yr.)
October 1998	Vegetation Monitoring (3 yr.)
October 1999	Vegetation Monitoring (4 yr.)
October 2000	Vegetation Monitoring (5 yr.)

1.4 Site Remediation

The U.S. Army Corps of Engineers asked that NCDOT complete the following grading repair work on the site:

- Fill in a trench created by silt fence removal.
- Remove trash that had been dumped by unknown sources.
- Grade down the front driveway/parking near the SR 1105 right of way.
- Install a chain with posts at the driveway entrance to deter parking.

NCDOT will complete the remediation work this winter.



2.0 VEGETATION (YEAR 5)

2.1 Success Criteria

Success Criteria states that there must be 50% survival rate of planted species and 50% area coverage of marsh vegetation.

2.2 Description of Species

The following species are targeted in the Wetland Restoration Area:

Scirpus robustus
Juncus roemerianus

2.3 Results of Vegetation Monitoring (5 year)

No monitoring plots were established. Visual observation of site reveals that Juncus roemerianus and Scirpus americanus are the predominant species within the site. It is estimated by visual observation that Juncus roemerianus and Scirpus robustus has an aerial coverage of 85%. The estimated aerial coverage of phragmites is approximately 10%. The existing phragmites was treated again in October.

Site Notes: Site looks good. Site has almost complete aerial coverage of Juncus roemerianus and Scirpus americanus. Other species noted: golden rod, juncus sp., spike rush, aster, pluchea, cyperus, few cattail, baccaris and spartina patens.

2.4 Conclusions

This site consists of approximately 1.5 acres, which was graded to the elevation of the adjacent wetlands. Juncus roemerianus and Scirpus robustus covers approximately 85% of the site which exceeds the 50% success criteria. Continuing efforts have been made to control the phragmites on site. The phragmites was treated again in October 2000.

3.0 OVERALL CONCLUSIONS / RECOMMENDATIONS

NCDOT has not completed the grading of the entrance to the site at the present; however, coordination efforts have been made to have this entrance removed by February 1, 2001. Due to the small magnitude of grading that will be involved in removing the entrance in relation to the entire project, NCDOT proposes to discontinue vegetation monitoring, pending the final remediation work.

APPENDIX A

SITE PHOTOS

Mann's Harbor - Photos



Photo 1: At entrance left side of site



Photo 2: At entrance middle of site



Photo 3: At entrance right side of site



Photo 4: Black needlerush in site